Estuaries

JOURNAL OF THE ESTUARINE RESEARCH FEDERATION

Volume 5, 1982

L. HAROLD STEVENSON

Managing Editor

Published by
Estuarine Research Federation

Estuaries Vol. 5, No. 4, p. ii–iv December 1982

Table of Contents

NUMBER 1, MARCH 1982

CRABTREE, R. E., AND J. M. DEAN. The structure of two South Carolina estuarine tide pool fish assemblages 2
OTSUKA, C. M., AND D. M. DAUER. Fouling community dynamics in Lynnhaven Bay, Virginia 10
LAWRENCE, D. R., AND G. I. SCOTT. The determination and use of condition index of oysters 23
NEUMANN, D. A., J. M. O'CONNOR, J. A. SHERK, JR., AND K. V. WOOD. Respiratory response of striped bass (*Morone saxatilis*) to suspended solids 28
SCOTT, G. I., AND D. R. LAWRENCE. The American oyster as a coastal zone pollution monitor: A pilot study 40
SHIRLEY, T. C., AND M. S. LODEN. The Tubificidae (Annelida, Oligochaeta) of a Louisiana estuary: Ecology and systematics, with the description of a new species 47
ULANOWICZ, R. E., J. M. LINDSAY, W. C. CAPLINS, AND T. T. POLGAR. Simulating the lateral transport of ichthyoplankton in the Potomac Estuary 57
MACKO, S. A., AND E. J. GREEN. An investigation of the dissolved free amino acids and their relation to phytoplankton cell density in the Damariscotta River Estuary, Maine 68
FEELY, R. A., A. J. CHESTER, A. J. PAULSON, AND J. D. LARRANCE. Relationships between organically bound Cu and Mn in settling particulate matter and biological processes in a subarctic estuary 74

NUMBER 2, JUNE 1982

RULIFSON, R. A., AND B. J. COPELAND. Traveling screens as sampling gear for vertical distribution studies 82
STROM, R. N., AND R. B. BIGGS. Phosphorus distribution in sediments of the Delaware River Estuary 95
DUOBINIS-GRAY, E. M., AND C. T. HACKNEY. Seasonal and spatial distribution of the Carolina marsh clam *Polymesoda caroliniana* (Bosc) in a Mississippi tidal marsh 102
NICHOLS, F. H., AND J. K. THOMPSON. Seasonal growth in the bivalve *Macoma balthica* near the southern limit of its range 110
LUNSFORD, C. A., AND C. R. BLEM. Annual cycle of Kepone® residue and lipid content of the estuarine clam, *Rangia cuneata* 121
TAGATZ, M. E., J. M. IVEY, C. E. DALBO, AND J. L. OGLESBY. Responses of developing estuarine macrobenthic communities to drilling muds 131
LUCAS, J. R. Feeding ecology of the gulf silverside, *Menidia peninsulae*, near Crystal River, Florida, with notes on its life history 138
JIMENEZ, D., J. E. PELCZARSKI, AND H. R. IWANOWICZ. Incidence of piscine erythrocytic necrosis (PEN) and *Glugea hertwigi* (Weissenberg) in rainbow smelt (*Osmerus mordax* Mitchill) in selected Massachusetts streams 145

CRABTREE, R. E., AND D. P. MIDDAUGH. Oyster shell size and the selection of spawning sites by *Chasmodes bosquianus, Hypleurochilus geminatus, Hypsoblennius ionthas* (Pisces, Blenniidae) and *Gobiosoma bosci* (Pisces, Gobiidae) in two South Carolina estuaries 150

NUMBER 3, SEPTEMBER 1982

ROBERTS, M. H., JR., AND R. E. BENDL. Acute toxicity of Kepone to selected freshwater fishes 158
BOSTON, M. A., AND A. J. PROVENZANO, JR. Attempted hybridization of the grass shrimp *Palaemonetes* (Caridea, Palaemonidae) with an evaluation of taxonomic characters of juveniles 165
LOESCH, J. G., R. J. HUGGETT, AND E. J. FOELL. Kepone concentration in juvenile anadromous fishes 175
LAMBERT, R., AND C. E. EPIFANIO. A comparison of dispersal strategies in two genera of brachyuran crab in a secondary estuary 182
LUTHER, G. W., III, A. L. MEYERSON, K. ROGERS, AND F. HALL. Tidal and seasonal variations of sulfate ion in a New Jersey marsh system 189
DITTEL, R., A. I., AND C. E. EPIFANIO. Seasonal abundance and vertical distribution of crab larvae in Delaware Bay 197
BRUNDAGE, H. M., III, AND R. E. MEADOWS. Occurrence of the endangered Shortnose Sturgeon, *Acipenser brevirostrum,* in the Delaware River Estuary 203
BAHR, L. M., JR., J. W. DAY, JR., AND J. H. STONE. Energy cost-accounting of Louisiana fishery production 209
MIGLARESE, J. V., C. W. MCMILLAN, AND M. H. SHEALY, JR. Seasonal abundance of Atlantic Croaker (*Micropogonias undulatus*) in relation to bottom salinity and temperature in South Carolina estuaries 216
MANYAK, D. M. A device for the collection and study of wood-boring molluscs: Application to boring rates and boring movements of the Shipworm *Bankia gouldi* 224

Short Papers and Notes

LYONS, W. B., T. C. LODER, AND S. M. MURRAY. Nutrient pore water chemistry, Great Bay, New Hampshire: Benthic fluxes 230
FELL, P. E., N. C. OLMSTEAD, E. CARLSON, W. JACOB, D. HITCHCOCK, AND G. SILBER. Distribution and abundance of macroinvertebrates on certain Connecticut tidal marshes, with emphasis on dominant molluscs 234
SMITH, J. W., AND J. V. MERRINER. Association of Cobia, *Rachycentron canadum,* with Cownose Ray, *Rhinoptera bonasus* 240

Book Review

SAN FRANCISCO BAY, THE URBANIZED ESTUARY. Edited by T. J. Conomos (editor). Reviewed by Donald E. Hoss 243

NUMBER 4 DECEMBER 1982

NEWELL, S. Y., AND R. E. HICKS. Direct-count estimates of fungal and bacterial biovolume in dead leaves of smooth cordgrass (*Spartina alterniflora* Loisel) 246

TURNER, J. T. The annual cycle of zooplankton in a Long Island estuary 261

CONOVER, D. O., AND M. R. ROSS. Patterns in seasonal abundance, growth and biomass of the Atlantic silverside, *Menidia menidia*, in a New England estuary 275

FRÉCHETTE, M., AND L. LEGENDRE. Phytoplankton photosynthetic response to light in an internal tide dominated environment 287

GRAINGER, E. H., AND M. S. EVANS. Seasonal variations in chlorophyll and nutrients in a Canadian arctic estuary 294

MCKEE, K. L., AND E. D. SENECA. The influence of morphology in determining the decomposition of two salt marsh macrophytes 302

DOERING, P. H. Reduction of sea star predation by the burrowing response of the hard clam *Mercenaria mercenaria* (Mollusca: Bivalvia) 310

Short Papers and Notes

CARLE K. J., AND P. A. HASTINGS. Selection of meiofaunal prey by the darter goby, *Gobionellus boleosoma* (Gobiidae) 316

MCDERMOTT, J. J., P. L. ZUBKOFF, AND A. L. LIN. The occurrence of the anemone *Peachia parasitica* as a symbiont in the scyphozoan *Cyanea capillata* in the lower Chesapeake Bay 319

FINDLAY, S. E. G. Influence of sampling scale on apparent distribution of meiofauna on a sandflat 322

Book Reviews

PLANKTON AND PRODUCTIVITY IN THE OCEANS. 2ND EDITION. VOLUME I—PHYTOPLANKTON. J. E. G. Raymont, J. D. Burton, and H. R. DYER. Reviewed by D. M. Nelson 325

ESTUARIES AND NUTRIENTS. B. J. Neilson and L. E. Cronin (editors). Reviewed by W. B. Lyons 326

COMMON PLANTS OF THE MID-ATLANTIC COAST. G. M. Silberhorn. Reviewed by V. S. Kennedy 326

A SELECTED BIBLIOGRAPHY OF WORLDWIDE OYSTER LITERATURE. L. L. Breisch and V. S. Kennedy. Reviewed by R. Dame 327

MARYLAND'S OYSTERS: RESEARCH AND MANAGEMENT. V. S. Kennedy and L. L. Breisch. Reviewed by R. Dame 327

MARYLAND'S OYSTERS: AN ANNOTATED BIBLIOGRAPHY. V. S. Kennedy and L. L. Breisch. Reviewed by R. Dame 327

Referees used during 1981–1982 328

Author Index to Volume 5 329

Subject Index to Volume 5 330

Announcing an ERF publication, Ecological Stress and the New York Bight: Science and Management 332